



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2021-0453; Project Identifier MCAI-2021-00377-R]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 2021-04-15, which applies to all Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters; and certain Model AS350B3 helicopters. AD 2021-04-15 requires repetitive visual inspections of the right-hand side of the vertical fin spar for discrepancies (cracking), and corrective action if necessary. Since the FAA issued AD 2021-04-15, the FAA has determined that additional actions are required to address the unsafe condition. This proposed AD would retain the requirements of AD 2021-04-15, and would require repetitive cleaning and repetitive detailed inspections for cracking of the vertical fin spar and vertical fin upper attachments, and corrective action if necessary, as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference (IBR). This proposed AD would also expand the applicability to include additional Model AS350B3 helicopters. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For material that is proposed for IBR in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. It is also available in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0453.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0453; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Kathleen Arrigotti, Program Manager, Large Aircraft Section, International Validation Branch, Compliance &

Airworthiness Division, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218; email [kathleen.arrigotti@faa.gov](mailto:kathleen.arrigotti@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2021-0453; Project Identifier MCAI-2021-00377-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposal.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Kathleen Arrigotti,

Program Manager, Large Aircraft Section, International Validation Branch, Compliance & Airworthiness Division, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218; email [kathleen.arrigotti@faa.gov](mailto:kathleen.arrigotti@faa.gov). Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

## **Background**

The FAA issued AD 2021-04-15, Amendment 39-21437 (86 FR 13165, March 8, 2021) (AD 2021-04-15), which applies to all Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters; and certain Model AS350B3 helicopters. AD 2021-04-15 requires repetitive visual inspections of the right-hand side of the vertical fin spar for cracking, and corrective action if necessary. The FAA issued AD 2021-04-15 to address cracking in the spar of the upper part of the vertical fin and fractures in the front attachment screws. This condition could lead to in-flight separation of the upper part of the vertical fin, resulting in loss of control of the helicopter.

## **Actions Since AD 2021-04-15 Was Issued**

The preamble to AD 2021-04-15 explains that the FAA was considering further rulemaking to address the actions specified in paragraph (2) of EASA AD 2020-0186, dated August 20, 2020. The FAA has now determined that further rulemaking is indeed necessary, and this proposed AD follows from that determination. This proposed AD would require additional actions and would expand the applicability to include additional Airbus Helicopters Model AS350B3 helicopters (i.e., Model AS350B3 helicopters modified through Eurocopter AS350 Service Bulletin 55.00.14 in service). Eurocopter AS350 Service Bulletin 55.00.14 was optional terminating action in EASA AD 2020-0186. However, helicopters modified by Eurocopter AS350 Service Bulletin 55.00.14 are

affected by fatigue cracking and must be inspected. A terminating action is not included in this proposed AD.

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0099, dated April 9, 2021 (EASA AD 2021-0099) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters; and all Model AS350B3 helicopters except those that have that embodied Airbus Helicopters Modification 073148 in production. EASA stated that recent analysis identified that AS350B3 helicopters modified through Eurocopter AS350 Service Bulletin 55.00.14 (any revision) in service might also be affected by the identified unsafe condition.

This proposed AD was prompted by a determination that additional actions are required to address the unsafe condition and additional helicopters are affected by the identified unsafe condition. This proposed AD was also prompted by a report that, during an unscheduled post-flight inspection of the tail cone area of an Airbus Helicopters Model AS355NP helicopter, a crack was found in the spar of the upper part of the vertical fin and fractures were found in the two front attachment screws. Airbus Helicopters Model AS350B3 helicopters have a similar vertical fin configuration and are subject to comparable load levels as the affected Model AS355NP helicopter, therefore, this model may be subject to the same unsafe condition revealed on the Model AS355NP helicopter. The FAA is proposing this AD to address cracking in the spar of the upper part of the vertical fin and fractures in the front attachment screws. This condition could lead to in-flight separation of the upper part of the vertical fin, resulting in loss of control of the helicopter. See the MCAI for additional background information.

## **Related Service Information Under 1 CFR Part 51**

EASA AD 2021-0099 specifies procedures for repetitive visual inspections of the right-hand side of the vertical fin spar for cracking; repetitive cleaning and repetitive detailed inspections for cracking of the vertical fin spar and vertical fin upper attachments; and corrective action. The corrective action includes repair.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **FAA's Determination and Requirements of this Proposed AD**

These products have been approved by the aviation authority of another country, and are approved for operation in the United States. Pursuant to the bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is proposing this AD after evaluating all the relevant information and determining the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

## **Explanation of Retained Requirements**

Although this proposed AD does not explicitly restate the requirements of AD 2021-04-15, this proposed AD would retain all of the requirements of AD 2021-04-15. Those requirements are referenced in EASA AD 2021-0099, which, in turn, is referenced in paragraph (g) of this proposed AD.

## **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in EASA AD 2021-0099 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD.

## Explanation of Required Compliance Information

In the FAA’s ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities (CAAs) to use this process. As a result, EASA AD 2021-0099 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2021-0099 in its entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in the EASA AD does not mean that operators need comply only with that section. For example, where the AD requirement refers to “all required actions and compliance times,” compliance with this AD requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in the EASA AD. Service information specified in EASA AD 2021-0099 that is required for compliance with EASA AD 2021-0099 will be available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0453 after the FAA final rule is published.

## Costs of Compliance

The FAA estimates that this proposed AD affects 650 helicopters of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

### Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2021-04-15	7 work-hours X \$85 per hour = \$595, per inspection/cleaning cycle	\$0	\$595, per inspection/cleaning cycle	\$386,750, per inspection/cleaning cycle

New proposed actions	4 work-hours X \$85 per hour = \$340, per inspection/cleaning cycle	\$0	\$340, per inspection/cleaning cycle	\$221,000, per inspection/cleaning cycle
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The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of helicopters that might need these on-condition actions:

#### **Estimated costs of on-condition actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
4 work-hours X \$85 per hour = \$340	\$17,052	\$17,392

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national



Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2021-04-15, Amendment 39-21437 (86 FR 13165, March 8, 2021); and

- b. Adding the following new AD:

**Airbus Helicopters:** Docket No. FAA-2021-0453; Project Identifier MCAI-2021-00377-R.

#### **(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected Airworthiness Directives (ADs)**

This AD replaces AD 2021-04-15, Amendment 39-21437 (86 FR 13165, March 8, 2021) (AD 2021-04-15).

**(c) Applicability**

This AD applies to Airbus Helicopters specified in paragraph (c)(1) and (2) of this AD, certificated in any category.

(1) Model AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters, all serial numbers.

(2) Model AS350B3 helicopters, all serial numbers except those that have embodied Airbus Helicopters Modification 073148 in production.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 5531, Vertical Stabilizer, Spar/Rib.

**(e) Unsafe Condition**

This AD was prompted by a report that, during an unscheduled post-flight inspection of the tail cone area of an Airbus Helicopters Model AS355NP helicopter, a crack was found in the spar of the upper fin and fractures were found in the two front attachment screws. The FAA is issuing this AD to address cracking in the spar of the upper part of the vertical fin and fractures in the front attachment screws. This condition could lead to in-flight separation of the upper part of the vertical fin, resulting in loss of control of the helicopter.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

## **(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2021-0099, dated April 9, 2021 (EASA AD 2021-0099).

## **(h) Exceptions to EASA AD 2021-0099**

(1) Where EASA AD 2021-0099 refers to its effective date or to July 12, 2017, (the effective date of EASA AD 2017-0114, dated June 28, 2017), this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2021-0099 does not apply to this AD.

(3) Where EASA AD 2021-0099 refers to flight hours (FH), this AD requires using hours time-in-service.

(4) Where paragraph (4) of EASA AD 2021-0099 specifies to contact the manufacturer for approved repair instructions, for this AD, if any cracking is detected during any inspection, repair before further flight using a method approved by the Manager, International Validation Branch, FAA. For a repair method to be approved by the Manager, International Validation Branch, as required by this paragraph, the Manager’s approval letter must specifically refer to this AD.

(5) Where the service information referred to in EASA AD 2021-0099 specifies to perform a visual inspection for cracking on the “RH side of spar (a)” and “if you are not sure” remove the rear and the tail rotor gear box (TGB) fairings to perform a detailed inspection and do a dye-penetrant inspection, those actions are required by this AD if any crack indication (e.g., paint chips, dents, or swelling) is found during any inspection done without removing the rear and the TGB fairings.

(6) Where the service information referred to in EASA AD 2021-0099 specifies to perform a visual check for cracks in the “spars (a) of the top and bottom fins” and “if you are not sure” do a dye-penetrant inspection, the dye-penetrant inspection is required by

this AD if any crack indication (e.g., paint chips, dents, or swelling) is found during any visual check (inspection).

(7) Where the service information referred to in EASA AD 2021-0099 specifies to check the integrity of the two thrust pad attachment screws for damage, for this AD, damage includes loosening, deformation, and nicks.

**(i) Special Flight Permit**

Special flight permits, as described in 14 CFR 21.197 and 21.199, are prohibited.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

(1) For EASA AD 2021-0099, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

This material may be found in the AD docket on the Internet at

<https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0453.

(2) For more information about this AD, contact Kathleen Arrigotti, Program Manager, Large Aircraft Section, International Validation Branch, Compliance & Airworthiness Division, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax (206) 231-3218; email [kathleen.arrigotti@faa.gov](mailto:kathleen.arrigotti@faa.gov).

Issued on June 2, 2021.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2021-11965 Filed: 6/7/2021 8:45 am; Publication Date: 6/8/2021]